Marked-up version showing the changes made

15. (Four times amended) A method for increasing the bearing capacity of foundation soils for built structures comprising: providing a plurality of holes spaced from each other, under the foundation of a built structure, deep in the foundation soil; injecting into the foundation soil, through said holes, a substance which expands as a consequence of a chemical reaction; producing compaction of the foundation soil contiguous to the injection zone due to the expansion of said substance injected into the soil; constantly monitoring level variations of the soil and/or built structures overlying the injection zone to detect the moment when the built structures and/or the soil surface, overlying said injection zone, begins to raise which is the moment in which the compaction of the foundation soil has reached levels generally higher than a required minimum value at which the soil lying below and around said injection zone withstands and rejects dynamic and static weights exerted thereon by said built structures and by overlying and adjacent soil masses, and wherein the expansion of the injected substance is very fast with a potential increase in volume of the expanded substance being at least five times the volume of the substance before expansion.

33. (Twice amended) A method for increasing the bearing capacity of foundation soils for built structures comprising:

-providing a plurality of holes spaced from each other, under the foundation of a built structure, deep in the foundation soil;

-providing an expandable substance with very fast expansion time and with a potential increase in volume of the expanded substance being at least five times the volume of the substance before expansion;

-injecting into the soil, through said holes, said substance which expands as a consequence of a chemical reaction;

-producing compaction of the soil contiguous to the substance injection zone through expansion of said substance injected into the foundation soil until the soil

compaction reaches levels which are generally higher than a minimum compaction value required to provide a bearing capacity of the foundation soil suitable to withstand any dynamic and static weight exerted thereon by the built structures and by overlying and adjacent soil masses; and

-determining attainment of said minimum compaction value required by constantly monitoring level variations of the soil surface and/or of the built structure overlying said injection zone to detect a moment when the built structure and/or the soil surface, overlying said injection zone, begins to raise, which is the moment when the soil lying below and around said injection zone withstands and rejects upwardly the dynamic and static weight exerted thereon by said built structures and overlying and adjacent soil masses.

Clean Version

~~15~~. (Four times amended) A method for increasing the bearing capacity of foundation soils for built structures comprising: providing a plurality of holes spaced from each other, under the foundation of a built structure, deep in the foundation soil; injecting into the foundation soil, through said holes, a substance which expands as a consequence of a chemical reaction; producing compaction of the foundation soil contiguous to the injection zone due to the expansion of said substance injected into the soil; constantly monitoring level variations of the soil and/or built structures overlying the injection zone to detect the moment when the built structures and/or the soil surface, overlying said injection zone, begins to raise which is the moment in which the compaction of the foundation soil has reached levels generally higher than a required minimum value at which the soil lying below and around said injection zone withstands and rejects dynamic and static weights exerted thereon by said built structures and by overlying and adjacent soil masses, and wherein the expansion of the injected substance is very fast with a potential increase in volume of the expanded substance being at least five times the volume of the substance before expansion.

~~38~~. (Twice amended) A method for increasing the bearing capacity of foundation soils for built structures comprising:

-providing a plurality of holes spaced from each other, under the foundation of a built structure, deep in the foundation soil;

-providing an expandable substance with very fast expansion time and with a potential increase in volume of the expanded substance being at least five times the volume of the substance before expansion;

-injecting into the soil, through said holes, said substance which expands as a consequence of a chemical reaction;

-producing compaction of the soil contiguous to the substance injection zone through expansion of said substance injected into the foundation soil until the soil compaction reaches levels which are generally higher than a minimum

compaction value required to provide a bearing capacity of the foundation soil suitable to withstand any dynamic and static weight exerted thereon by the built structures and by overlying and adjacent soil masses; and

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-determining attainment of said minimum compaction value required by constantly monitoring level variations of the soil surface and/or of the built structure overlying said injection zone to detect a moment when the built structure and/or the soil surface, overlying said injection zone, begins to raise, which is the moment when the soil lying below and around said injection zone withstands and rejects upwardly the dynamic and static weight exerted thereon by said built structures and overlying and adjacent soil masses.